9
1874
14367
2034
U.S. PATENT OFFICE
46713

Vol. II

GLEANINGS IN BEE CULTURE.

No. 1

Or how to Realize the Most Money with the Smallest Expenditure of Capital and Labor in the Care of Bees, Rationally Considered.

PUBLISHED MONTHLY, AT MEDINA, OHIO,

BY A. I. ROOT & CO.

In the Preparation of this Journal the following are the Principal Periodicals Consulted:

American Bee Journal. *Clarke.*

Bee Keeper's Magazine. *King.*

National Bee Journal. *Mrs. Tupper.*

[*Also Bonud Volumesof the former since 1860, and Files of all other Bee Journals that have been Published in America.*]

American Agrieulturist,

Prairie Farmer,

Rural New Yorker,

Country Gentleman,

Ohio Farmer,

Scientific American.

"Novice's Wind-Mill Print," Medina, Ohio.

CONTENTS:

	Page.
Some of our Exchanges	2
How to Conduct an Apiary	3
What is a Hive of Bees Worth?	4
Problem No. 19	5
Can a Colony be Built up in Winter by Supplying Artificial Heat?	5
Selling Receipts	5
Editorial	6
Cheap Bee Feed	6
Review of the Bee Journals	6 & 7
Shall we Clip Queens Wings?	7
Conventions	7
Humbugs and Swindles	8
"Blasted Hopes."	8
Honey Column	9
Reports Encouraging	9
Heads of Grain	9
Straw Hives	9
Vetch, as a Honey Plant	10
Eggs by Mail	10
Wintering	10
"Latest Intelligence" Corner	11
Bee Journals and Punctuality	11
About *Us*	11
Quilts and Propolis	11
Wine and Brandy Casks for Honey	11
Receipt for making Comb Guides	11 & 12
Honey Labels	12
$1.00 Queens	12

SF521
G5

Some of Our Exchanges.

The *Rural New Yorker* has been so many years almost a "household word" in many localities, we hardly deem it necessary to give it an extended notice. More than twenty years ago we recollect it as the brightest and most attractive,—to "us children"—of any of the weekly papers, and since we have kept bees many are the valuable items we have *gleaned* from its pages. Terms $2.50; less in clubs, D. D. T. Moore publisher, 5 Beekman St. N. Y.

The *Ohio Farmer* has, in years past, furnished many valuable articles on Bee Culture, and as an agricultural paper it certainly possesses a value to the people of Ohio and adjacent States, over the eastern papers of this class, on account of its value as a home paper. We take pleasure in adding it to our list and recommending it to our friends. The terms, $2, we think may be considered low for an agricultural paper of its size published weekly.

It will be observed that after the Bee Journals, we give the *American Agriculturist* a place at the head of Agricultural periodicals. We have a two-fold reason for this: First, that their department of Bee Culture, by Mr. Quinby, for many years past has been of much value. Secondly, the general tenor and tone of the paper. For years we have read their opening notes, and "Hints About Work," with a feeling of being benefitted and made better "every time," although "we" are not a farmer.

Their Humbug and Swindle department has been a great blow at a class of evils that threatened, for a time, to demoralize almost our whole population, and yet Orange Judd & Co. seemed to stand *alone* almost, in their position in regard to Gift Enterprises, Lotteries, Quack Doctors, etc., until within the last four or five years.

As a single illustration of how much the *Agriculturist* has helped us in different departments in life, we will mention that the "Hexagonal Apiary" given in April No. for 1873, was suggested by reading the very valuable series of articles by Mr. Stoddard in 1871, entitled, "An Egg Farm."

The ideas there suggested in regard to economical division of labor in making any branch of agriculture a specialty, is worth enough to pay for the paper a half dozen years. Could those same "Egg Farm" papers be obtained in book form, it seems to us they would interest and benefit a great mass of people who may perhaps never think of Poultry rearing as a business. We should say with all emphasis in regard to the *Agriculturist:*

Wide may it spread, and "long may it wave."

A year or two ago our attention was attracted by a piece of paper blowing along the streets, for said paper contained a picture of what proved to be a Bee hive. And after having captured the piece we found it contained a description of a hive by A. L. Hatch, Richland Co., Wis., (we fear we shall never get fully converted to thinking it best to tell only the *county* "a body lives in;") this hive, 'twas stated, could be made for a dollar, and the engraving much resembles our present "dollar hive," but it seemed to us, no adequate provision was made for a cover and bottom board that would be secure from effects of the weather, but we then felt sure, that with proper machinery, such hives could be made as good as need be desired for the sum mentioned; in fact we had them then in use but had not determined to offer them for sale. We gathered from the scrap of paper that it was a fragment of the *Country Gentleman*, published at Albany, N. Y., at $3 per year, weekly; and we have added it to our list, as may be seen on the cover.

We mention the *Scientific American* last on our list, and it may not be readily apparent to all just how it enters into the domain of Bee Culture. Well, in this way: It has been almost our constant friend from boyhood, and from it we have learned to judge of the strength and properties of wood and metals; of the uses and possibilities of machinery in aiding us in home affairs; of the chemical properties and values of articles for domestic use, with which we come in daily contact. It has aided us greatly in arranging our Windmill and machinery, and in devising the cheapest, strongest and most effective weather-proof hives; in a proper understanding of how we may economize labor in extracting honey; the laws which govern centrifugal force, etc. In constructing extractors it has aided us in deciding what metals are most economical, and in what shape we may get the greatest strength with least expense, etc., etc. Need we go farther? It will certainly prove a good investment to all who will take the time to read it, see advertisement.

TERMS: STRICTLY CASH IN ADVANCE.

One Copy One Year 75 Cents, or with Photograph of Apiary, size 8X10, Mailed Free, Postpaid, $1.00, or Photograph will be sent as a Premium for Two Subscribers at 75 cents each.

Any person obtaining Three Subscribers at 75 Cents each, may retain 25 Cents for their trouble.
" " Five " " " " 75 " "
" " Ten " " " " 2.50 " "

Any number above Ten will be sent at the rate of Fifty Cents each.

Names may be sent at any time during the year, and whenever a club is reached, we will credit back the amount previously sent us in excess of the Club Rates. In this way any of the

Articles Mentioned on our PRICE LIST may be Secured as PREMIUMS.

Please mention when names are intended for Clubs. An acknowledgment will be sent in all cases on receipt of money—for any purpose whatever—by return mail. Volume I, for 1873 may be counted on the same terms, as we have a

Large Supply of BACK NUMBERS Provided for new Beginners!

As we cannot take the space in future numbers to go over the same ground again, and Volume One contains the entire Fundamental Principles and

Ground Work for Starting an Apiary.

"Gleanings in Bee Culture."

DEVOTED EXCLUSIVELY TO BEES AND HONEY.

Vol. II. JANUARY 1, 1874. No. 1.

HOW TO CONDUCT AN APIARY.

AFTER wishing our readers all both old and new, a "Happy New Year," we would remark that we should be very happy indeed to be able to tell them *the best* way to conduct an Apiary during this month, if we could, but perhaps it may be as well to be frank about it and say in the beginning "we dont know." If colonies are all strong and the weather is cold perhaps the best advice we could give would be to say "let 'em alone." They might be given candy even now if any were in danger of starving but we hope none of our readers have been so improvident. Should your Bee House contain a large number of very strong stocks, during mild weather they may get too warm and become uneasy, or should the room feel close and have an unpleasant smell we would open the doors after dark and then close them again next morning before light. A caution is proper here, however, for 'tis to be remembered that our thick sawdust walls are as much to keep the inside *cool* at times as to keep the bees warm, and so we would never open the doors so long as a thermometer showed a lower temperature inside than that of the out door air. Many times we can keep the temperature at 40 degrees inside when it may be 60 or more at midday outside. Bees wintered out doors need no attention when they are healthy, unless it be to shade the hive, when they would get lost in a very light snow as has been so often recommended. To be frank again we have of late had almost as little experience with out door wintering as with *Box Hives*, yet we are always glad to get reports from its advocates. 'Twould be rather easier to stop here and not consider colonies that were *not* healthy and prosperous, for we really know of nothing we could recommend to be done for bees with the Bee Malady at this season, with much hope of success. *Actual experiments* so far as we know, such as taking the bees into warm rooms and feeding sugar syrup in clean comb, etc., at this season, do not seem to have been very successful. At the present time of writing Dec. 12, from reports we have been able to collect we should prefer to risk them at a temperature of 40 or 45 degrees, rather than 50 or 60, and if any change were to be made in the food we should if possible give them sugar syrup that was sealed up in the fall or summer; if this could not be had then candy. We believe Feb. or even March have been the worst months, and cannot help thinking that commencing brood rearing has something to do with the matter. See problem in this No. We strongly suspect that problems 12, 13, and 16 also, will be found to have a close connection with the matter. In looking for facts to guide us in the matter we glean from the back numbers of the various Journals as follows: *Bee Keeper's Magazine*. Vol. 1, pages 73 and 74.

"Will bees breed and rear young bees without being permitted to fly for a length of time?"

"Will the flour that is put in the sugar-candy recommended for winter feeding, supply to some extent the want of pollen?"

As the Editor gives no other answer except the brief monosyllable "Yes" to both inquiries he has helped us but little. The second query however suggests an idea that may be valuable. Mr Wilkin stated he had made some such experiments, but nothing definite had resulted.

In *A. B. J.* Vol. IX pages 137 and 138, we find something that agrees much with our experience, viz: that bees when confined to the hive during brood rearing, become rapidly depopulated, and to use Berlepschs' own words, "The death rate increases from day to day, the most of the bees becoming weak and enervated."

We presume this refers to a condition of things where pollen is absent from the hive.

Langstroth's Book gives us more information on the subject than all other sources combined, see pages 81 and 82, and he also mentions having succeeded in inducing them to use rye flour in the hive but this was during the month of Sept. To sum it all up it appears that brood rearing cannot certainly go on to any great extent without pollen, but we do know that brood is reared in strong colonies to some extent during Jan. and Feb. even when confined to the hive by cold weather. Should these same colonies be kept in a room warmed up to 50 or 60 degrees and confined to the hive, more brood might be reared if the supply of pollen was kept up, yet we have had no direct experiment to show that the health of the colony would not be seriously injured by such confinement; and as to building up weak colonies by supplying artifical heat, it seems that to do this they must fly out or have some such exercise. Whether this exercise can be given them in a way to answer the purpose and still prevent their being lost remains to be seen. There is one thing we can all do safely, and that is to provide a quantity of Rye and Oats ground together very fine for them to use as soon as spring opens. We would advise providing about one bushel for every ten stocks.

WHAT IS A HIVE OF BEES WORTH?

"MR NOVICE why cannot we sell bees too? We have been selling Hives, Frames, Queens, and in fact almost everything pertaining to Bee Culture except Bees. Now we certainly have no objection to selling a whole hive, bees and all, if they are willing to pay what they are worth to us. Now what is a fair colony of Bees worth? That is, how much shall I charge a friend of mine for one?"

"Truly, the point you mention needs consideration. If our bees are valuable to us they would probably be so to others, and to those who prefer buying a colony all in working order rather than to undertake the task of transferring, Italianizing, etc., it certainly is no more than proper that we should have some kind of a regular valuation for them; but our queens—we dare not warrant them pure, how about that?"

"Oh, we can make our estimate with 'dollar queens' and then if the one under consideration should have proved herself extra we can add a proper amount for desirable qualities; Messrs. Shaw & Son offer tested Queens for $2,50. and should one have proved herself extra prolific besides, estimate her at from $3 to $5,00. as the case may be."

"Very well, then we have only to decide how much a colony's bees, combs, and contents of the combs are worth, and add them to the value of Hive (one story) Quilt and Queen, and—here, give us a pencil,——

Last three items, from our price list are worth	$2.25
Ten frames of comb, metal corners and fair average of worker comb, each 75c.	7.50
Four quarts of Bees worth per quart 1.00	4.00
Pollen and brood etc. contained in comb say,	2.25
Total	$16.00

Should the queen prove equal to the task of rearing three banded workers 'every time,' call it about $18.00 and if *extra* prolific $20.00 perhaps. If in addition to all of these the hive should contain sufficent bees to occupy an upper story at a season when these bees would be available for honey gathering or Queen rearing perhaps $25.00 would not be an extravagant price, in our own locality."

"There, Mr Novice you have gone and considered the "bright side" of the subject only, but 'tis for all the world just like you.

If a "quart" of Italians are worth a dollar, how much are hybrids and even black bees worth? and then suppose the queen *does not* rear three banded workers but only two, one or possibly bees without "ary" stripe, what is *she* worth? and supposing that combs should be black, and crooked, and nearly all drone, or or not built half way down; or supposing our colony had neither honey or pollen, and that there wasn't even *one* quart of bees, how much would a swarm be worth then? Be frank now for even in our Apiary we occasionally have Hives having some, if not all of these faults."

"Well, well, give us a little time and a better pencil and we'll take all the 'dark shades' into consideration too, let us see, to go back to $16.00 and take the 'down grade,' we shall have to fix a value on dollar Queens that turn out hybrids, and as we have repeatedly pinched the heads off some fine ones, we will value them at only 25c. and as to black queens, well really, we never heard of selling them at all, until *Mrs. Cotton's* circular quoted them at *five dollars* each, but as we promised not to 'comment' we will only say that we could only consider a black queen tolerable until we could replace her with an Italian. Hybrids we will rate at 75c. per quart, and blacks at 50c., drone combs (as good for extractor) at 50c., and we really can't rate old dark colored combs any less if you women do persist in thinking new white ones most valuable; if the frames are only partly filled, we'll say 25c. each, and now (where's that pencil again,) we have value of a poor swarm of bees thus:

Hive and Quilt	$1.25
Black Queen	.00
Ten frames of comb partly filled at 25c.	2.50
Half a 'quart' black bees at 50c.	.25
Contents of comb	.00
	$4.00

There, how will that do?"

"But Mr N. we don't often have such a colony (all bad) in a simplicity hive, it would more likely be found in a box hive, or what is it they call 'em at the south?"

"Gum?"

"Yes 'Gum.' Had'nt you better subtract $1.85 from the four dollars for hive quilt and frames, and call a—the——"

"Gum? 'Tis really too bad that your education has been neglected so much that you have never seen one. We should not value *them* any higher than common Queens, but Mrs Lizzie Cot——."

"But you are not to mention her any more, you know."

"Well our colony of Bees we mean, and at *two dollars and fifteen cents* we really think you cannot accuse us of not having considered the value of poor stocks as well as good."

"But do you really mean Mr N. to value the combs of such a colony at $1.90 and the Bees and Queen at only 25c.?"

"We do; for a very small colony of Black Bees even in the hands of an expert would be very uncertain property; but empty comb can be kept any length of time and we fear has never been properly valued. As 'tis a tedious job to fasten pieces of comb into frames we shall if possible endeavor to have all comb made in such frames as we prefer in the first place, and if not filled out they are always ready for the bees to take it up right where their predecessor left off."

Before closing it may be as well to consider that many large sales of Italian Bees have been made at figures considerably less than the estimate, for instance, Adam Grim sold R. Wilkin, we think something like 50 colonies of choice Italians in good movable comb hives for $11.00 each, in the spring of 1872. Transportation from Wisconsin to Ohio cost a little more than $1.00 each only. As the above was given from memory it may not be exact, but we think is not far out of the way.

Bees like other stock or merchandise, should be sold at lower rates in large quantities, perhaps it would be fair to estimate that a Bee-

keeper could as well afford to sell 50 colonies at $12.00 each as to furnish a single one at $18.00, taking into account trouble of preparing them for shipping etc., etc.

Just as we are finishing, friend Patterson, of Freestone, writes to know how many combs a colony should cover in Oct., for instance, to enable them to winter. Now to give a careful guess at it we would say that if you do not see bees clustered in at least *three* spaces during a cool day, you had better not undertake to winter them. If they can be seen in four spaces, call them fair; five spaces good, six spaces fine, and seven, "tip top." More bees than the latter we should not consider desirable for one queen.

PROBLEM NO. 19.

WHAT are the necessary conditions to insure healthy brood-raising in winter, should it be desirable? It is pretty generally agreed we believe that full colonies winter much safer than Nuclei and many times we have colonies that have been weakened by different causes in the fall to such an extent that the attempt to winter is unsafe to say the least, and yet they have valuable queens. Now where we have many such it would well repay the expense of a room artificially warmed and all cost of food could we thereby get them up into good trim to stand it until spring opens.

There seems to be a difficulty in the matter of brood rearing during confinement to the hives, but little understood. Our experiments given on another page as yet (Dec. 12,) have produced nothing very encouraging. To be able to build up a colony at pleasure during any month in the year (as we do in June for instance) and thus have a full Apiary of extra strength independently of the weather whenever we choose to invest the necessary amount to acomplish it, Novice estimates, would be an acquisition calculated to give Bee-keeping a great start, and that the desired information would be worth $100 at least to us alone. We cannot raise good queens in winter 'tis true (or at least we suppose it is) but if it is really true Florists and Market Gardeners have become able to rear almost everything in the vegetable kingdom at pleasure regardless of season, why cannot we rear bees in stocks where we have good queens? P. G. fears 'tis almost an impossibility, but Novice remarks "we have ultimately succeeded with so many difficult points during the past season, why may not careful study and experiment vouchsafe us a similar reward in this; and may not such research at the same time unvail the mystery of the Bee disease?" Who among our readers will help? We shall be very glad of reports.

Mr. Quinby's excellent article in the *Agriculturist* for Dec. on wintering bees, contains the following:

"That syrup of sugar does not prevent it in such weather was proved in many cases the past winter where the combs were filled with it and nothing else, and were badly soiled before the bees failed."

Now in the great number of reports we have received, no such have ever come to hand where the bees were fed in time to seal their stores. Thin, unsealed syrup has in some cases seemed to be unwholesome, yet not like honey after all. We really hope Mr. Q.'s suggestion of keeping the bees in a room warmed artificially to a temperature of 50° or thereabouts, may be practically a success, as bees never suffer thus in warm weather.

Could they be allowed to fly out there would be no trouble, but we fear it would not do to fasten them in at that temperature, more especially toward spring. Darkness *will not* keep them in at such times, for we have had them buzzing about our ears when the room was dark as "ink in a stone bottle," and the worst trouble with dysentery we ever had was in the winter of 1868, when February was almost as warm as April. The bees were in a cellar and had natural stores. We could not keep the cellar cool even by opening the doors and windows nights. As Mr. Q. says, a good strong, *healthy* colony of bees seem to be almost oblivious of any degree of cold, yet after they get thinned down or weakened by disease, cold seems to operate disastrously, and a room warmed artificially for such, we think might save them. We have one just such, now near us; the bees seem bright and healthy, but the queen looks very small and thin, and we find no eggs in the combs. We have (to-day, Dec. 1,) just inserted a comb containing pollen, to see whether it will start brood-rearing.

Dec. 4th.—We find the queen has deposited eggs quite plentifully, although the pollen given them did not fill more than 2 doz. cells.

Dec. 9th.—Found eggs in combs as before, but nothing more. Placed the pollen next the eggs and improvised a wire house for them to fly in, which they did, but few of them got back to the hive without help.

Dec. 10th.—Gave them flying room in an upper story with wire cloth on top; with one corner of the quilt turned up they got back to the cluster without trouble. Kept the temperature to-day 10° or more higher by placing the hive over a stream of air warmed up to about 70°.

Dec. 18th—No eggs, but the bees look quite healthy, and have died very little since last examination. Pollen remains in the comb, all, or nearly all of it.

WE entirely agree with the *Agriculturist's* view of selling receipts. Of those offered for sale at prices ranging from 25c. to $10, or more, we have never found one yet so offered of any value, and the same thing is almost invariably found more intelligently given, free in our Receipt Books or through our Scientific Journals.

SHOULD the bees get uneasy during warm spells of weather in winter, the doors or windows of the Bee House or cellar should be opened during the night. If they are confined to the hives by wire cloth this is all the more important. After they have been once quieted down and induced to go back on the combs the temperature may usually be allowed to come up to 40 or even 50 degrees without again making them uneasy.

Gleanings in Bee Culture,

Published Monthly,

A. I. ROOT & CO.,
EDITORS AND PROPRIETORS.

MEDINA, OHIO.

Terms: 75c. Per Annum.
For Club Rates see Second Page.

MEDINA, JAN. 1, 1874.

In answer to several inquiries in regard to the "tea-kettle feeder," we would say that it is neither patented nor *patentable*, nor is the idea of soldering perforated tin over the mouth of a tin fruit can, or any other utensil, for feeding bees, patentable.

On the wall opposite are a very pretty pair of chromos. They were received from H. A. King & Co., as samples of those they offer with their Journals. While we should not think of estimating their value at $5 or $10 each, we certainly consider them well worth the price they ask for them to any one *wishing to purchase pictures.*

When we quoted from Pres. Bingham's speech last month we had not learned he had said "Novice" where Mr. King had placed a blank, nor did we know that he had a "patent hive" "all his own." Novice rubs his nose meditatively on receiving the above items and remarks something about having supposed he had finished that piece of work and "got everything swept up clean."

This No. with our circular will be sent to many who are not subscribers, but hereafter none except sample copies will be sent unless paid for in advance; *no exceptions.*

We prefer to send Gleanings to none except those who really value it, and we should be very sorry to intrude it upon any one who might consider it an unwelcome visitor; therefore we accept no evidence of its being sincerely wanted other than the customary remittance of the modest little sum of 75c. or less in clubs.

Mrs. Tupper, in her Nov. Journal, says: "But if we must have a rule for the syrup we will say a gallon of water to four lbs. of sugar." Now we thought Mrs. Cotton's "feed" at *six cents* a pound very cheap even if the recipe did cost $10.00, and had we not wasted all our money for the "Ambrosial" we might have sent for it; but Mrs T.'s plan is cheaper and she don't charge anything either. Let us see, a gallon of water weighing eight lbs, and sugar four, makes 12 lbs., and total expense is less than 48c., or 4c. per lb. and we really think it the "most wholesome food that can be made," only we fear 'twould be like the old gent's discovery, viz: that sawdust was excellent food for cattle when mixed with bran, but a queer fact was that the more bran he used, the better was the "feed." We presume Mrs T. meant one quart of water, instead of a gallon, but she should remember that "little pitchers sometimes have very long ears."

We believe the consistency of the syrup as we find it sealed up by the bees is at about the rate of 20 lbs. of sugar to a gallon of water, with sugar at 11 1-2 c., the real cost of syrup that will compare well with honey and will certainly *go as far* for feeding, is very near *eight* cents per lb. When feeding must be done does any one doubt which is the cheapest? We have just sold our last barrel of Clover honey for *twenty* cents.

Bee Keeper's Magazine for Dec. contains an excellent article by Mrs. Tupper, entitled, "All About Hives." Her view of the subject is liberal and broad, with a clear view of wants and needs of future Bee-keepers. Her remark that "the time is coming soon, however when honey will not be sold in the comb at any price," is rather a bolder assertion than even Novice would make, yet we think it quite probable, We can hardly agree with her that bees *should not* be examined in winter, for our view of things, if we had waited until March, for the past two seasons, might have been a sorry one.

We have supposed that a good many had been saved by nursing them through the winter, and that "a stitch in time saved nine," etc., but it may be our efforts availed little after all. So many report having wintered finely in cellars where vegetables were kept, and where lights and footsteps were matters of daily occurrence, that we are inclined to think the disturbance occasioned by frequent inspection not injurious.

The suggestion that Novice claims to have first discovered that bees could be wintered on sugar is certainly a grave error, but that he first advocated the idea in print that sugar stores for winter was a remedy for the bee disease, and hence safer as well as cheaper, we shall maintain until some document be shown to the contrary. If Mr King does not *yet* feel

satisfied to recommend sugar in place of honey we would advise him to carefully record the results of the great number of practical experiments made of that kind.

A remark made in the *A. B. J.* intended to express our disapproval of the plan of not giving residences of correspondents, perhaps implied more than we intended it should, but we confess to a dislike of finding when we reach the end of an article that 'twas from plain "John Smith" with no other earthly clue to his whereabouts; and although we cannot say we feel satisfied, 'tis the better way, we must admit we have had the subject presented us from a standpoint of view we had not heretofore considered, and that there are some very cogent reasons for withholding the full name and address. We hope we shall never be unwilling to acknowledge an error or injustice when satisfied we have committed one, whether it be commonly considered derogatory to the Editorial character or not.

Filling pieces of comb with syrup as Mr King advises might have given very good satisfaction in 1863, but we fear our modern Apiarist would hardly be content with so slow and laborious a method; and does he consider too that in selling the Peabody Extractor he encumbers his patrons with a *patented* machine that must be eventually laid aside for the superior light running home-made ones? 'Twould be idle to argue a point that demonstrates itself so readily by actual experiment.

We most heartily approve of Mr King's method of furnishing hives of any kind ordered from manufactories close at hand, and we commend the Dec. No. of the *Magazine* as particularly valuable.

We were certainly much pleased to receive *Mrs. Tupper's Journal* for November done up in a style so neat, and with such an attractive cover that we never should have recognized the old *National Bee Journal* at all, were it not for the name. We shall have to conclude that woman's taste is certainly equal, if not superior to that of the sterner sex, in such matters. The typography and general appearance of the whole fully agrees with its appearance externally, and the whole work certainly does her credit. We wish her a large list of subscribers. Mrs. Tupper's Journal is certainly valuable, it could not well be otherwise, and right here we would ask why it can not be *called Mrs. Tupper's Journal*, and thus aid in making it *possible* to explain to our friends that the *National Bee Journal*, was a separate institution from the *National* Agriculturist and Bee-keepers Journal of N. Y.

Mrs. T. says "Novice does not differ so widely from other Bee-keepers as he would have us suppose," which we are well aware of, for what was considered some of his most extreme views a year or two ago are now being echoed in a way that would sound very much like some who say when forced to concede a point, "why, we always said so." Now Mrs. T. your other remark that: "It has always appeared to us singular, to say the least, that in no one of our bee journals is found mention of another—each one ignoring utterly the existence of another," was rough on us, for in our opening No. we certainly did notice all the Journals, and there were more then than now, and we did also notice your own *National Journal* so well that one of the associate Editors wrote "awful bad" to us; if you meant that Gleanings *wasn't* a Journal we shall feel worse still, for our Feb. No. informed you that 'twas constituted a Monthly as soon as the first No. was before the public.

If Adair's *theory* that bees breathe through their wings be true, and that "a queen with a clipped wing is like a man who still lives though a part of his lungs be gone," how will he explain the fact of queen's living and thriving with no wings? Is it possible in his experience *practically*, he has seen no such? We remember one of our best queens, in fact the mother of the colony that gave us the 330 lbs. in a season, had both wings gnawed off close, probably in being introduced, and she was equally prolific for two seasons at least.

Queens two or three years old are frequently almost destitute of wings. Our opinion of conventions was mainly intended for those who had not made bee-keeping profitable, and we have no reason yet to change our decision, that those who make their bees most profitable *are not* those who are foremost at our large conventions. Mrs. Tupper's report of the North American Society certainly contains much of value, and we tender her our thanks for giving it to the people in a correct and valuable shape, but we are pained to find that she again insists that Extracting injures the brood, totally ignoring the mass of evidence from those who have for years been in the habit of extracting honey by the ton. If conventions are to be valuable they should embody *at least* enough practical bee-keepers to keep down Adair's folly, and Mrs. Tupper's inexperience with the extractor.

It may be well to add that 'tis only necessary to clip a very small portion (to avoid marring their beauty) of one wing of the queen to prevent loss in swarming; we have lately been informed that Adam Grim clips the wings of his queens in his whole Apiary of nearly 1000 colonies.

WE this month omit the usual heading of this department out of respect to the sex of delinquent. Our readers can each and every one determine for themselves as to where she should be classed.

A subscriber writes, enclosing circular:

"As you have gone into the recipe business, I herewith send you a circular fram 'away down in Maine.'"

As we always prefer to hear both sides of all questions, we dropped the lady a line, which elicited the following:

I will only say that I hold myself responsible for all statements made in my circulars, and shall hold you responsible for any statements which you may publish in relation to me or my business.

Respectfully,
LIZZIE E. COTTON.

P. S.—Much is often gained by minding one's own business, or,

"To speak a little plainer that the *point* you may see,
Is it any of *your business* what *my business* may be?"

Now it seems to us the lady certainly cannot complain if we assist her in advertising, by giving a few extracts from her circular, without note or comment, and without any charge whatever. We clip as follows:

Cotton's Controllable Hive. I have succeeded after many costly and unsuccessful experiments, and careful and determined investigations, in constructing a hive which used in connection with a new system of management, original with myself, is destined to work a complete revolution in the management of bees.

The capacity of my hive for surplus honey is 31 glass boxes, containing when well filled about 4 lbs. each. These hives are so arranged that the bees have *direct* access to them from the main combs of the hive, without passing through any partition or obstruction whatever. Bees *invariably* enter these boxes without manifesting the slightest hesitation. They *never* remain idly clustering on the outside of the hive, as is so often seen in others.

Controlling or preventing swarming. I claim that I have solved, so as to render available to *every* bee keeper, this *leading* point to *successful* and *profitable* management of bees. *Everyone* who is acquainted with management of bees will readily see the great advantage arrising from successfully controlling or preventing swarms. I am able with my hive to obtain either swarms or surplus honey *at will*. When swarms are desired I arrange at the commencement of the season to have them issue, and when surplus honey is preferre l, I with a very simple process original with myself, turn the whole force of bees to storing honey, and at the same time keep up the same increase of bees as if swarms were allowed to issue, and to those who have not tested the matter it is surprising what quantities of honey a colony of bees not allowed to swarm will collect over one casting swarms. There have been several plans advocated for controlling or preventing swarms, but all have failed.

Food for bees. Feeding bees is sometimes *absolutely necessary* to save the stock from starvation, at other times it is desirable to feed to induce early swarms, and at other times feeding is resorted to for the purpose of filling the brood section of the hive with honey of inferior quality for the use of the bees, in order to secure in boxes all that is collected from the fields by the bees. I will here state that I am an advocate of feeding under each of the above circumstances, and I have labored to prepare a food which will suit the tastes of bees, and not prove injurious to them. I have succeeded in preparing a food for bees which meets all requirements, besides being *very cheap*, costing only about *Six Cents per pound*. Bees readily store it away in combs, and will build combs for storing it, when fed on this alone; and whether fed in large or small quantities, no bad effect is produced upon the health of the bees. Bee keepers who have attempted to feed have generally found it up hill business, the bees many times refusing to take up the food furnished; at other times they have found that it has incited the bees to robbing, and many stocks have been destroyed by robbing, when the prime first cause was an attempt to feed some weak colony, as after bees have once been rendered furious by plundering a weak stock, or by being fed all together in the open air, they often venture to attack strong stocks, and thus many stocks are annually destroyed; and bees as usually fed frequently become diseased, suffering from dysentery, etc., through the winter, and often die before spring from this cause, or if they live through the winter they are so weak in the spring as to be of little profit that season. But with my food no such loss will be experienced. This food fills a want long felt by bee keepers. *I warrant it the best food for bees that can be produced.*

PRICE LIST.

For a vigorous colony of Native bees in Controllable hive, with full and minute directions for management, safe arrival at end of express route guaranteed.....$25.00
For vigorous colony of Italian bees, other conditions same as above.....30.00
For an empty controllable hive with directions for management.....15.00
Italian Queens.....10.00
Native Queens.....5.00
Glass honey boxes fitting Controllable hive, each.....15
Recipe for the manufacture of food for bees.....10.00
Feeders, made to fit any hive, singly $2.00; per dozen.....20.00
Smokers.....1.00
Bee veils,—a perfect protection from stings.....1.00

Address, LIZZIE E. COTTON,
West Gorham, Maine.

January, 1873.

DEAR NOVICE:—I like your little paper very much, and one reason why I like it, is because you are always ready to go for all swindlers and humbugs, especially Mr. Mitchel, who swindled me out of ten dollars for a pretended device to fertilize queens in confinement. He fairly promised me that if the thing would not work as he said, he would refund the money; but after he had the money he refused to answer every letter that I wrote about it. So "go for him" and all other swindlers.

J. M. MOHLER,
Covington, Ohio.

DEPOSITORY OF

Blasted Hopes,

Or Letters From those who have made Bee Culture a Failure.

DEAR NOVICE:—Although I am taking Bee Journals, I am destitute of bees now. During 1871 and 1872 I lost all I had, viz: 15 colonies of bees called Black. Not one left. "*Dysentery! dysentery!* They were all I had; and were purchased by getting a $1 here and a $1 there; and getting one colony here and another there, etc., etc. All is gone. Also bought two counties of the Buckeye Bee-hive. It proved worthless, and I lost my house and lot here by it, thus throwing me flat. But I must have bees next year—1874. What can you do to start me in *Italians*? Give advice, and aid me under these difficulties if you can. I can handle bees quite easily.

Kindly, Yours,
J. DRUMMOND.

Kygerville, Gallia Co., O., Nov. 20th, 1873.

Now if it should come to pass that there is no remedy for the Bee-disease, there certainly is one for losing money in patent rights. Never invest in rights or receipts, but get one or two colonies some way honestly and build up again. Don't expect, or even accept of aid unless it comes as a just equivalent of fair, honest, days works; you can then feel that your possessions however small are *all your own*, and you are thus far as independent as the best among us.

Honey Column.

I HAVE 200 lbs. of comb honey, also 1000 lbs. of dark extracted, for which I ask 20c. per lb., all through. All my honey so far sold—at retail—has brought me a net of 28 to 30c. per lb.

JAMES HEDDON,
Dowagiac, Mich.

I have 400 or 500 lbs. of extracted and 250 lbs. of comb. I raised 1500 lbs of the latter and 800 of the former. Price for comb in frames 20c. per lb., for extracted from 10 to 12c. per lb., delivered here.

J. L. DAVIS, Holt, Mich.

Since above was set up we learn Mr. D. has sold all his extracted honey; and all the honey in our neighborhood has been sold for 20c. per lb., by the barrel.

REPORTS
Encouraging.

APIARIAN REPORT.

NUMBER of Stocks in the spring 26, of which 3 were queenless. No. of stocks at date, 40. No. of lbs. of surplus honey stored this season—mostly in 5 lb. boxes, 1541.

D. P. LANE.

Koshkonong, Wis., Nov. 1st, 1873.

Had 3 hives last spring, increased to 8, and 60 lbs. of honey.

Respectfully, Yours,
C. C. MILLER, Chicago, Ills.

Bees have not usually done very well around here, especially where comb honey was relied on, have seen but one box of comb honey in this town this year; but by the use of the extractor and plenty of empty comb, I got from 8 swarms—some of them quite weak in the spring—three new swarms—natural—and 1026 lbs. extracted honey, and have more honey not extracted, than they will need for winter. Have sold all my honey for 15c. per lb., wholesale. Honey is now scarce.

I think you are hardly fair in proposing to publish "the names of your subscribers who have *lost* money in bee-keeping during the last five years;" they are not the class of bee-keepers that subscribe for GLEANINGS.

S. ROWELL,
Fairibault, Minn.

I made an extractor from a suggestion in your paper. I live in a dairy region, so I took one of my cans—we send our milk to the cheese factory—put in a cross piece far enough from the bottom to have the top of the frame come to the top of the can, put in some wooden pins on the under side of the cross-piece, to rest on the bottom of the can, put in my gearing made from an old broken paring machine, and it worked very nicely. I could take out about 75 lbs., when I would have to empty, by pouring out of the top. I took out 600 lbs., and am confident that I should not have got 50 lbs. of box honey.

SUBSCRIBER.

All the stocks that we have now—over 40—are wintering in our cellar on their own stores, and appear in a fair condition. After selling some in the spring we had 39 left. I should say we commenced with 50 hives. We have sold bees, honey and wax to the amount of $429.13, and we can spare $100 worth more, mostly comb honey; this is nothing great, but will do, considering the amount of farm work I have done, all of which is respectfully submitted, notwithstanding the "Blasted Hopes."

J. L. DAVIS & Co.

The Co. means my daughter, who will act as "P. G."

I have 81 swarms of bees, and have made over 5000 lbs. of honey the past season. I cannot well do without the GLEANINGS, so here is your 75 cents. I have sold my honey for 15 and 25c. per lb., and dont feel like giving it up.

GEORGE PARROTT.
Winamac, Ind.

Heads of Grain,
FROM DIFFERENT FIELDS.

NOVICE, what do you mean by telling us to see our bees often in the winter? You do not mean for us to ever *handle* them when they are in winter quarters, do you?

D. A. BROCKWAY,
Manteno, Ill.

Just this: That you go in the house after dark once or twice a week, and examine them by raising a corner of the quilt, or if bottoms are movable, raise the hive gently and see how many dead bees have fallen down, etc. It will be very convenient to have a lamp and matches kept ready for use.

Whenever your visits seem to arouse or disturb them, we shall say that you are careless, and we should not open the doors much during extremely warm, or cold weather.

Mr. Quinby's plan of warming up the room by a stove, we fear, would make too much disturbance, unless great care be used.

A neighbor of mine, and a Bee-Keeper, was traveling in the south part of our State last spring, and stopped at a farm-house to dine. He saw a large number of bee-hives in the yard, and a greater part of them were the old-fashioned straw hives. He enquired of the farmer how his bees wintered, and was told that all the bees died in the Yankee hives, "but all mine Dutch hives made mit straw, not von die;" and every one of them was strong and vigorous.

Now, Friend Novice, this report brought home by my neighbor, set me to thinking whether something might not be invented in the proper shape to hold our frames and bees, and answer the same purpose as the straw hive for out-door wintering, for all bee-keepers have not winter houses or cellars.

J. BUTLER,
Jackson, Mich.

Thanks for the item. We are well aware of the advantages of straw hives for wintering, see Quinby's Bee Keeping, page 73, but we really fear they would have little effect toward preventing the real Bee Disease. Can Mr. Quinby afford us any additional light on straw hives since his book was published? We have seen no mention of them in his recent articles on wintering. Mr B. mentions an experiment he is making with double walled hives made of pine lath, with the space filled with dry wheat chaff. Now our friends should bear in mind that the beneficial results from straw hives are as much dependent on the facility with which straw *dries out* as its property of absorbing moisture; and in order to dry out quickly it must not exceed say an inch and a half or two inches in thickness. Mr Muth of Cincinnati has just sent us a straw mat that is nicer, more tidy and compact than any thing we supposed could be made, and which will we think be excellent. It is stiff enough to make a whole simplicity hive in fact, and were we not afraid exposure to summer weather would induce decay too soon we should seriously consider them for hives the year round. They would have one *very valuable* quality, viz: lightness, and when we ascertain the cost of the article we will consider straw hives. Even for indoor wintering they would be quite desirable under circumstances as follows:

Several quite cold days reduced the temperature in our Bee-house to about 32 degrees, a

sudden change with rain raised the atmosphere outside to 50 or more, and the stream of warm damp air coming in the ventilator was condensed in dew all over the hives, wall, etc., and even the quilts felt damp. Now under such circumstances straw hives would be much the most comfortable.

Dec 10th, the following has just come to hand:

I am very glad my straw mats found your approbation, and I supposed it would. I shall not have time enough to make mats for sale this winter, but Mr. M. Nevins, of Cheviot, O., will always have plenty on hand, and leave a lot at my store ready for shipment. He will sell them at $4.50 a doz.

Any body wishing straw mats may address myself or M. Nevins, Cheviot, Hamilton Co., O.

I have imported from Germany, vetch and summer rape seed. Vetch—in German, *Wicke*—affords excellent food for bees, and is besides, good food for horses and cattle. It is sown like rape, and about the same time, and grows like peas, with flowers in all colors. Rape we all know already. It takes 50 lbs. vetch seed and 4 lbs. of rape seed to sow an acre, at least, so I am informed by my German correspondent.

I can sell rape seed at 35c. per lb., and vetch seed at 20c. per lb.; or if sent by mail at an advance on the above rate of 5c. per lb.

C. F. MUTH,
Cincinnati, O.

The mats at the price would be rather expensive for making the sides of hives, but will well repay expense, to be used on top for out-door wintering. As to whether they would be beneficial where bees are housed, we are unprepared to say. As the expense is but a trifle more than wire cloth, it would certainly be a good idea to try them if they can be arranged readily so as to confine the bees.

We certainly must have some *vetches* next season. The "flowers in all colors," captivate our fancy in anticipation already.

DEAR GLEANINGS:—The two pieces of comb that I got, I positively think had no larvæ, only eggs and a few bees just biting the caps open. I had 19 cells reared, 14 I could cut out, 4 destroyed. *Ten good queens for fifty cents.* Mr. Crall built a bee-house and I got my bees in it too; we have 92 colonies in it and it is only a little more than half full, the house is 12x16 feet, wall 10 inches thick. We put our bees in Nov. 13th. They appear all right, nice and quiet.

S. H. MILLER,
Ashland, O.

Is it not possible that those same hatching bees kept the eggs warm, and thus contributed to the unusual success of friend M? See page 79, Vol. 1.

I am a beginner in Bee Culture; I have read "Langstroth on the Honey Bee," "Mysteries of Bee Keeping," by Quinby, and one volume of the *American Bee Journal*. I am a subscriber for the A. B. J. I commenced last spring with six stands, two Italian and four Black ones, three of them were very weak; they swarmed out after they were set on their summer stand. I have raised my own Queens and Italianized all my bees. I have now twenty-two strong stands, and they all have honey enough to winter. I am going to follow Bee-Keeping, and have read all of "*Novice's*" writing for a year and am interested.

MRS. D. M. HALL, Linn Center,
Rock County, Wis.

We are particularly pleased with the above report, principally because it comes from a married woman; not that we have less sympathy for the Misses, but that 'tis too often the case, the former have too many cares to really enjoy Bee Culture or anything else. We opine many of the veterans would find it a task to make a better summer's work with the same start than has our friend, Mrs. H.; will she please report again next season?

WINTERING.

FRIEND NOVICE:—GLEANINGS for August is at hand, and if you could have seen the smile of satisfaction with which its arrival was greeted, you would have been repaid in part, at least, for the disagreeable things some of the patent right men say about you for pitching into them.

On this subject I would only say; "Keep on in well doing," and "give 'em fits."

I cannot, however, subscribe to all the teachings contained in GLEANINGS. For instance: I do not believe it will *pay* a majority of our bee-keepers to extract the honey and try to winter their bees on syrup, in order to escape dysentery, for I believe the severity of the winter had more to do with the loss of bees in this section at least, than the quality of their honey had; and in proof of this I will give you a few facts that occurred in this neighborhood.

A neighbor living half a mile south of here had eight swarms that he undertook to winter in a cold shed, and lost six of them by dysentery. Another living half a mile west wintered his on their summer stands, and lost all he had by the same disease. A friend living one-fourth of a mile east brought his bees, consisting of four swarms, and put them in my bee-house. One of them, a late swarm, died of starvation. The other three were in splendid condition when he took them away, about the first of March; but after that date he lost two of them, having no warm place in which to put them during the severe cold that occurred in March. Another friend living 5 or 6 miles west undertook to winter his bees, consisting of 38 swarms, out doors. He had lost 7 up to Jan. 1st.; and then came and told me that a number of the remaining stocks were so reduced that he thought they could not live until spring, and asked me what to do with them. I advised him to put them in his cellar. He did so, and now tells me he only lost one stock after putting them in the cellar, and he now thinks that perhaps the bees were nearly all dead in that before they were carried in.

I put 88 swarms in the house to winter. Three of these consisted of bees taken out of my nucleus hives. One of the three was put in as an experiment, being queenless; and the other two had young queens that had not laid any eggs when winter set in, and I do not know that they ever did. I lost the above three, and one of my regular swarms by some unknown cause, probably old age, as the bees from the nucleus hives were nearly all old; and two swarms by starvation, leaving from 15 to 30 lbs. of honey; the bees having clustered at one side of the hive, their stores being at the other.

My bees were put on their summer stands Feb. 19th, but when the weather turned cold all the weakest stocks were put back in the house again, and remained there until we had pleasant weather. As a consequence, I did not lose a swarm by dysentery, the combs of those that died being as clean as they were in the fall.

You will please notice that in the above case, the bees that were lost had been kept near to and almost all around me, so that their honey could differ but little in quality from what my bees had, and if it does not indicate that cold was the main cause of the losses bee-keepers sustained; I shall have to conclude that straws do not always show which way the wind blows.

JAMES BOLIN, West Lodi, O.

Thanks, friend B., you have given us an excellent proof of the advantage of a good frost-proof repository, and as Mr. Quinby says: (see notice of his article,) Cold must be *one* part of the trouble, as bees do not die thus in summer.

Now we should be very sorry indeed to have our friends think we were so firmly astride of our "sugar" hobby that we were incapable of accepting proper proof that we were in error. 'Tis not the winters alone that have produced the trouble, we believe all admit, and if it shall be found necessary to combine the sugar diet with careful housing, providing we can thus get through the winter safely, we think few will complain. We have not personally made the experiment of out door wintering with sugar stores, but a neighbor has, and the difference was too marked to admit a doubt of which diet was healthiest.

OUR, "Day before going to Press," CORNER.

Questions not too lengthy, may be answered through this department even if not received until within two days, of the first of the month; and in two days more, nothing preventing, you may have your paper containing the reply. If our friends would use a separate piece of paper for this, and in fact for each of the departments, and write on one side only t'would be quite a favor, but if it's too much trouble, don't do it, for we want to hear from you any way.

DECEMBER 29TH, 1873.

Mr Muth informs us Honey Jars will be somewhat less for next season, as per his advertisement which see.

Our bees are to-day, Dec. 27th, as quiet and healthy as we could desire, but the weather has seldom been colder than freezing for the last month.

Annals of Bee Culture has not yet made its appearance, although it was advertised to be out about the first of Dec.

If friend Adair would succeed with his Quarterly he should be more prompt than he has been with the Annals heretofore.

The *American Bee Journal* of late does not reach us until near the middle of the month, and *Mrs. Tupper's* not until about the 25th although she proposes to be on hand by the 15th, *The Magazine* has we believe, been generally on hand a day or two before the first of the month. Cannot we all strive in a friendly way to see who will be most punctual?

Probably none of our readers have seen an urchin more pleased during the hollidays, than is Novice at present, who is rejoicing in the posession of a new Printing Office ordered expressly to print our little Journal.

Of course the "Windmill" had to be "harnessed" and brought into subjection, which has been accomplished perfectly, only that 'twill go too fast at times for his untrained hands, but with the assistance of Miss Maud or Master Ernest, to remove the papers from the Press and pile them, he gets along very well. As he must of course try his hand too, at type setting— in fact he is enjoying himself hugely at this very minute in setting up this very item— we trust everything hereafter, will appear in "apple pie" order. [He has already made "*pi*" among the types to his full satisfaction.]

"P. G" says, "beware of making too great calculations on a fair specimen of typography, for the Journal even under Novice's supervision may be a failure in that respect;" to which he adds, we may assure our friends if 'tis *not* well done we at least *did our very best to have it so.*

Since the above we have printed all but the cover and perhaps should make an apology for using type for heads of Departments, that we should not have used had we not been repeatedly disappointed in getting the proper kind in time. Also, should some of our friends by chance receive a No. with the print slightly askew, reccollect it was probably occasioned by a sudden acceleration of the speed of the Wind-mill, too great for Novice's inexperience in feeding the press. If notified we will furnish a good copy in place of all such.

NOVICE will you be kind enough to tell us how to *clean* quilts—ours are stuck up with propolis—some of them are about as stiff as a board,—you will do us a favor by enlightening us on this point.

J. Oatman & Co., Dundee, Ills.

We really don't know of a cheaper way than to put on a new cover of cotton cloth. Benzine it is true will dissolve the gum, but we have found it rather unsatisfactory to wash them. Cannot some use be made of propolis (like bees-wax) that it may be made a marketable commodity? The quilts are not apt to kill bees even if quite stiff, and we use them two or three seasons without much trouble.

1st.—Will it do to store honey in wine or brandy casks, (we can buy such when it would be very difficult to get them made on purpose)?

2nd.—Do you think the young bees or queens would not be apt to make mistakes in an Aplary on your plan, supposing the grape vines were omitted?

3rd.—I expect to have all my bees—31 stocks—in "Simplicity hives" next spring. Would it do to pour a half pound of feed on the cluster of bees at once? Wouldn't it make a muss?

4th.—We are told to make our bees fill the apartment given them at all times. Suppose that on examining a hive in spring, the bees are found to occupy about three combs, all of which contain brood, but very little honey, that being in the other combs at each side. How are we to confine the bees to those three combs, and avoid the evil of cutting off their supply of honey and pollen? Respectfully, yours,

G. C. MILLER, Mount Hanley, Nova Scotia.

1st.—We have always used wine and brandy casks for shipping small quantities of honey, and found no trouble. They can be purchased cheaply, of almost any size at the drug stores, and seem to be just what is needed.

2nd.—We think the omission of the grape vines would make no difference whatever; we have a number of hives in front of the house, entirely without the vines.

3rd.—A half pound, unless very thick, and the colony very strong, would be sure to run out and make a muss. Try less.

4th.—You will find no such trouble in practice we think. Allow them honey and pollen sufficient at all events.

Our readers may have observed an advertisement of a plan for securing straight combs, in some of our Bee Journals, during the past season, by our friend whose name appears below. The plan seems to be somewhat a combination of Dadant's Comb Guide Press, and directions given in the North American Bee Journal some time ago. We believe Mr. W. has sold a number of the Directions, but we think we have convinced him of the impractibility of his method, for one of our subscribers who had purchased it, offered to send it to us and in fact we know of no reason why information should not be freely communicated if valuable.

Mr. W. now sends it to us for publication, and we hope all credit will be accorded him, where it is found to be valuable.

We have seen a similar device used, but found our thin pine strips to answer so well, and so much less trouble *to us*, to make and put in, that we have used nothing else. It should be remembered that we have always had our comb built between two others, and

under such circumstances we have never had them leave the comb guide.

COMB GUIDE CONSTRUCTOR.

An Easy Way to Secure Straight Combs within the Frame.

Every Bee-keeper who keeps bees on the improved system of management, undoubtedly knows the great advantage in having the combs built straight in the frame. Without this advantage no one can make much improvement in bee culture. There are different methods of securing straight combs, but nearly all have some disadvantages. For neatness, cheapness, and simplicity, I claim the following plan has no equal:

DIRECTIONS.

First. Make a straight edge of wood ¾ inch thick by ⅝ inch wide, and ¼ inch shorter than the inside of top bar of frame.

Second. Ingredients—Take one part Resin, nine parts Beeswax. Heat over a slow fire until thoroughly melted.

Third. Have a wet rag or sponge in readiness, moisten the edge, turn the frame upside down, then lay the straight edge on the frame where the wax guide is to be formed. Then, with a teaspoon, pour a little of the melted wax on the upper end, (the frame being inclined at an angle of 45 degrees) and let it run down along the straight edge. When the wax has become hard, remove straight edge lengthwise to loosen it. Moisten the straight-edge frequently, and a good and reliable wax comb guide will be formed, equal to the best, which must be kept a profound secret.

E. J. Worst, New Pittsburgh, O.

P. S.—The melted wax must be kept warm, not *hot*. If the wax has the right degree of heat, it will seldom adhere to the straight-edge. If it chance to, scrape it off with a knife and remoisten, &c.

We are happy to announce that a neighbor of ours is making preparations to print all kinds of gummed labels by the quantity.

Orders for Honey Labels may be sent to us and the labels will be returned by mail post paid. Prices are, for Labels in two colors, with name and residence of Apiarist, and name of source from which the honey was gathered.

1,000	$2.75
500	1.90
250	1.45

No orders filled for less than the latter price.

$1.00 Queens.

IN this department we propose giving gratuitously the names of those who will undertake to rear queens for $1 each under the conditions we have made. While we cannot undertake to be responsible for all the names given, we shall endeavor to insert none who are not in the habit of fulfilling all agreements.

And if nothing interferes, I shall sell warranted pure Italian Queens for one dollar next season.

JOHN L. DAVIS,
Holt, Mich.

We think if Mr. D. or any other Queen rearer will warrant all $1.00 Queens to be strictly the progeny of carefully tested mothers 'tis all that we should expect of them. Purchasers will then stand the same chance of getting fine queens that those rearing them do, and the latter class will not seriously injure their Apiaries by selling the best continually and keeping the poorest, for even should we receive $10 or more each, 'twould be a losing business to select the best we had for every customer who was willing to pay for such.

"In Nov. No. page 85, you ask who will assist, etc. I will, and will send them by return mail after the season is fairly opened. I have been selling queens for $1 each for three years. Choice queens I sell for $2, and tested for $5; it requires the use of a swarm for thirty days to test a queen, hence it is cheaper to sell for $1 or $2. I agree with you that orders should be filled by return mail. I have never failed to do so in but two cases, and they were out of season. This is a good thing in selling $1 queens.

W. HOSMER,
Janesville, Minn.

Glad of your assistance Mr. H. If you can rear queens at the rate you do honey, we shall not need to worry for fear orders can't be filled.

ADVERTISEMENTS.

Advertisements will be received at the rate of ten cents per line, Nonpariel space, each insertion, cash in advance; and we require that every Advertiser satisfies us of his responsibility and intention to do all that he agrees, and that his goods are really worth the price asked for them.

MUTH'S ADVERTISEMENT.

HONEY JARS.

One pound Jars, per gross,	$ 6.50
Two " " "	8.50
Corks, "	.75
Tin Foil Caps, "	1.20
One and Two Pound Labels, per gross,	.90
Three " " "	.65
1 qt. Self-Sealing Dictator Fruit Jars, per gross,	17.00
" Mason's patent, " "	19.00

Langstroth's Bee Hives, Bee Veils, Uncapping Knives, &c., I offer at lowest possible prices.

Straw Mats,—to fit the top of Langstroth's hive—the manufacture of M. Nevin's, Cheviot, Hamilton Co., O., and well made, at $4.50 per doz.

For further particulars, Address,

CHAS. F. MUTH,
Cincinnati, O.

1tf

AMERICAN BEE JOURNAL.—Established by the late Samuel Wagner, at Washington, D. C. Now published at Chicago, W. F. Clarke, Editor and Proprietor. Subscription price, $2 per year, in advance. Sample numbers sent on application.

BEE-KEEPERS, ATTENTION!—Send 25cts. for three months' subscription to NATIONAL BEE JOURNAL, now published and edited by ELLEN S. TUPPER, Des Moines, Iowa. Liberal terms to Agents. Specimen number free.

DO **TRY IT 3 Months for 10 Cents;** or with $3 Chromo for 50 cents; or 6 months with "The Flowers of Paradise," a first-class $6 Chromo, 15½x21 inches, for $1. The National Agriculturist and Bee Journal is a 16-page paper of 64 columns, handsomely illustrated in all its departments. One of the best *Agricultural* and *Family* papers published. Only $1 per year, or $1.25 with best Bee-Book, or **$1.50** with a beautiful Chromo. Bee-Keeper's Magazine, a 32-page monthly, same terms, or both for **$1.75.** Send now for samples, and **Liberal Terms to Agents free.** H. A. KING & Co., 14 Murray St., N. Y. 1w2

The Best Paper! Try It!!

The **Scientific American** is the cheapest and best illustrated weekly paper published. Every number contains from 10 to 15 original engravings of new machinery, novel inventions, Bridges, Engineering works, Architecture, improved Farm Implements, and every new discovery in Chemistry. A year's numbers contain 832 pages and several hundred engravings. Thousands of volumes are preserved for reference and binding. The practical receipts are well worth ten times the subscription price. Terms, $3 a year by mail. Specimens sent free. May be had of all News Dealers.

PATENTS obtained on the best terms, Models of new inventions and sketches examined, and advice free. All patents are published in the Scientific American the week they issue. Send for Pamphlets, 110 pages, containing laws and full directions for obtaining Patents.

Address for the Paper, or concerning Patents, MUNN & CO., 37 Park Row, N. Y. Branch Office, cor. F and 7th Sts., Washington, D. C. 1tf